STUDENTS FLY HIGH OVER

Spring Break

by Kim Hulsey

Some students may spend Spring Break partying at the beach, but for others, a high-flying good time takes on an entirely new meaning. More than 200 university students traded in a trip to the beach for a ride aboard the KC-135 aircraft this spring.

The Reduced Gravity Student Flight Opportunities Program, sponsored by Johnson Space Center, provides a unique experience for undergraduate students to propose, design, fabricate, fly and evaluate a reduced gravity experiment of their choice aboard the KC-135. Inside the aircraft, also known as the "Weightless Wonder," weightlessness is achieved by performing a series of parabolas, each of which gives passengers nearly 30 seconds of reduced gravity.

University Affairs Officer Donn Sickorez said that the program aims to motivate college students majoring in science, technology or engineering as well as to introduce these subjects to students who may not have considered them.

Each student team is made up of four undergraduate student flyers with an unlimited number of people providing support on the ground. The team must go through a rigorous application process to participate and finally fly their experiment in the weightless environment. As part of the application process, the students must submit a letter of intent and a proposal that outlines the technical specifications, safety evaluation, outreach plan and administrative requirements of the experiment. After the experiment is selected, it must pass a Test Readiness Review before being flown. Finally, after flying, the students are required to submit a final report of the project.

"It's one thing to design an experiment in the classroom, but it is completely different trying to operate it and have it produce valid data in a weightless environment," said Jackie Jaron, a junior in astronautical engineering at Purdue University. "This was one of my most rewarding experiences."

Jaron and her Purdue teammates flew an experiment to test the effects of weightlessness on nanophase materials, and they were just one of more than 70 teams that participated this year.

"Not counting any flights this year, we have flown 1,211 students from 103 different schools in 44 U.S. states," Sickorez said. "That's not bad for six years."

For more information on the program, contact Sickorez at donn.g.sickorez1@jsc.nasa.gov.

PHOTOS CLOCKWISE FROM TOP

A University of Minnesota student smiles from the KC-135 cockpit.
jsc2003e26089 Photo by Bill Stafford

Students get some preflight safety training from Randell Woodard, Aerospace Physiology Technician.
jsc2003e24485 Photo by James Blair

A University of Texas student enjoys his free-floating time on the Weightless Wonder.
jsc2003e27714 Photo by Bill Stafford

Two Purdue University students demonstrate their weightless gymnastic skills.
jsc2003e27758 Photo by Crystal Schroeder

An Auburn University student shows off her new microgravity skills for John Yaniec, Lead Test Director for the KC-135.
jsc2003e28478 Photo by Bill Stafford